

TECAFORM® AD HPV13 brown - Stock Shapes (rods, plates, tubes)

Chemical Designation

POM-H (Polyacetal (Homopolymer))

Colour

brown

Density

1.5 g/cm³

Fillers

PTFE powder

Main features

- very good slide and wear properties
- good mechanical properties
- good machinability
- good chemical resistance
- low water absorption
- good dimensional stability

Target Industries

- food processing
- food technology
- conveyor technology
- power engineering
- gear manufacturing
- packaging and paper machinery
- business machines

Mechanical properties	condition	value	unit	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	380,000	psi	ASTM D 638	(1) publicly sourced data (2) publicly sourced data (3) publicly sourced data
Tensile strength at yield	@ 73 °F	7700	psi	ASTM D 638	
Elongation at break (tensile test)	@ 73 °F	10	%	ASTM D 638	
Flexural strength	@ 73 °F	13,000	psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	450,000	psi	ASTM D 790	
Compression strength	@ 73 °F, 10% strain	13,000	psi	ASTM D 695	
Compression strength	@ 73 °F, 1% strain	3000	psi	ASTM D 695	
Compression modulus	@ 73 °F	240,000	psi	ASTM D 695	
Impact strength (Izod)	@ 73 °F	1.5	ft-lbs/in	ASTM D 256	
Rockwell hardness	R Scale @ 73 °F	118		ASTM D 785	
Rockwell hardness	M Scale, @ 73 °F	78		ASTM D 785	
Coefficient of friction	Static	0.07		ASTM D 3702	1)
Coefficient of friction	Dynamic, 40 psi, 50 fpm	0.12		ASTM D 3702	2)
Wear rate	Against Steel, 40 psi, 50 fpm	20*10 ⁻¹⁰	in ³ -min/ft-lbs-hr	ASTM D 3702	3)
Thermal properties	condition	value	unit	test method	comment
Melting temperature		347	°F	-	1)
Deflection temperature	@264 psi	244	°F	ASTM D 648	2)
Deflection temperature	@ 66 psi	334	°F	ASTM D 648	3)
Service temperature	Long Term	185	°F	-	4)
Thermal expansion (CLTE)	range 85F to 140F	6.8*10 ⁻⁵	in/in/°F	ASTM D 696	5)
Other properties	condition	value	unit	test method	comment
Limiting PV	@ 100 fpm	1,600	ft-lbs/min	-	1)
Limiting PV	@ 10 fpm	12,000	ft-lbs/min	-	2)
Moisture absorption	@ 24 hrs, 73 °F	0.12	%	ASTM D 570	
Flammability (UL94)	6.33 mm			-	3)

→ Resin specification:
ASTM D6778-06 POM0110 L13 B57230 superseding ASTM D4181-00 POM110L13A00000
Shapes specification:
ASTM D6100-11 S-POM0132

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended. Data is obtained from extruded shapes material unless otherwise noted. References to FDA compliance refer to the resins from which the products were made unless otherwise noted. All trade and patent rights should be observed. All rights reserved. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com.